REPSG
React Environmental
Professional Services Group, Inc.

October 6, 2008

Ms. Alizabeth Olhasso
PCB Compliance Officer
U.S. EPA Region 3
1650 Arch Street, Philadelphia, PA 19103

RE: Project Status Update Former Schmidt's Brewery Project
North 2nd Street and Girard Avenue, Philadelphia, PA
REPSG Project Reference No. 006651.130.03

Dear Ms. Olhasso:

Northern Liberties Development, LP ("NLD") has contracted React Environmental Professional Services Group, Inc. ("REPSG") to obtain approval of a Self-Implementing On-Site Cleanup and Disposal Plan/Risk Based Disposal Approval Plan ("Hybrid Plan") from the United States Environmental Protection Agency ("EPA") Region 3 Toxic Substances and Control Act ("TSCA") Program ("EPA TSCA Program"). This Hybrid Plan will present a scope for removal, disposal and/or capping of polychlorinated biphenyls ("PCBs") in soil as appropriate for the planned redevelopment at the Former Schmidt's Brewery site ("Site"). The entire Site will be capped, therefore the action levels are considered to be 10 ppm in high occupancy areas and 100 ppm in low occupancy areas.

The Site has been studied by REPSG and others. Site activities prior to September, 2008 were presented to the EPA TSCA Program in the *Project Summary Report* dated July 29, 2008. Since that time, REPSG has been in communication with the EPA TSCA Program and several technical points have been clarified. The purpose of this letter is to summarize communications with the EPA TSCA Program and present clarification of certain technical points and data gathered. A brief summary of the resolved technical issues is presented below:

- Prior investigation of groundwater utilized Method 8080. At the specific request of the EPA TSCA Program, one additional round of sampling of the five (5) accessible on-Site monitoring wells will be performed via method 680. Wells will be sampled via low-flow method and a single duplicate sample will be collected from one of the wells and will be field filtered utilizing a 1-2 micron filter. Results will be presented to the EPA TSCA Program prior to the filing of the Hybrid Plan.

- REPSG provided information indicating that the subject Site would be developed in two phases. The first Phase (referred to as Phase I) would consist of commercial space and is planned to begin construction early January 2009. The timetable for the second phase (referred to as Phase II), which will be residential, is as yet unidentified. USEPA confirmed that an approval for remediation of Phase I could be granted independent of Phase II, provided that Phase II was stabilized/secured so as not to impact Phase I. It is not known at this time if separate Hybrid Plans will be submitted for Phase I and Phase II of the planned development.

- REPSG requested clarification as to whether the area of the Site at which will be constructed a building planned to contain a grocery store on the second story with a ground level parking garage below would be considered a high occupancy or low occupancy area for remediation purposes. In email correspondence dated September 9, 2008 you indicated that the low occupancy remediation standard could be applied to this area.

- REPSG requested that the EPA TSCA Program allow relocation of on-Site soil containing total PCBs greater than 10 ppm and less than 100 ppm to a specific low occupancy area of the Site. In a telephone conference on September 28, 2008, you indicated that this proposal was acceptable, provided that the risk-based rationale for the previous Pennsylvania Department of Environmental Protection ("PADEP")-approved cleanup levels was provided. This information will be presented under separate cover prior to filing of the Hybrid Plan. Because previous public notifications were provided and this is a Hybrid Plan, no further public notifications are required.

Items which have recently been raised and are undergoing further discussion include the following:

- The proposed redevelopment includes a park space. REPSG has proposed that a low occupancy remediation standard should apply to this area based on the anticipated future usage. Additional clarification on the park construction was provided to the EPA TSCA Program on September 25, 2008. In a teleconference on September 28, 2008 you indicated that it was preferred that the park area, since it is located within a larger residential area of the development, be considered high occupancy for the purposes of the Hybrid Plan.

- A soil sampling plan was proposed in Section 6.0 of the June 29, 2008 *Project Summary Report.* The purpose of this soil sampling program was to provide delineation of four (4) specific areas of the Site, including three (3) locations in the shallow soil profile and an area in the deeper soil profile in the area known as "Building 21". This sampling plan was implemented in July 2008 as will be discussed later in this document. REPSG has requested concurrence from the EPA TSCA Program that these four (4) locations are the only areas requiring further delineation. In response to this request, additional mapping was provided on September 26, 2008 to clarify the vertical and horizontal distribution of PCBs in soil. Further discussion is pending. REPSG plans to conduct additional delineation sampling, if required, in October 2008. A sampling plan will be provided to the EPA TSCA Program prior to implementation.

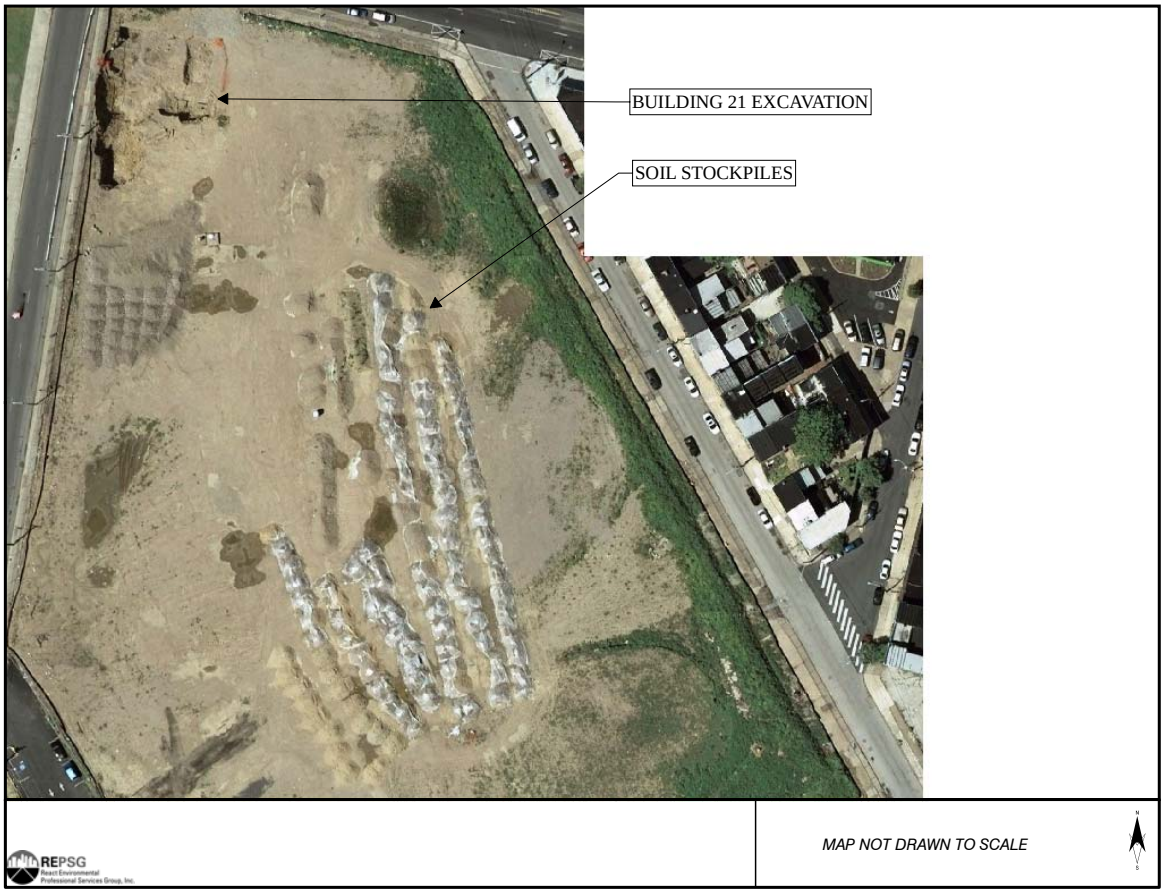
- The area referred to in the June 29, 2008 *Project Summary Report* as the "Building 21" area was previously remediated via direct excavation. Some temporarily stockpiled soil which was removed was subsequently replaced in the excavation. The EPA TSCA Program has requested further clarification of this process. Additional grab soil samples were collected via Geoprobe in the Building 21 area in July 2008. The EPA TSCA Program has requested confirmation that PCB-impacted soil in this area was not diluted during the stockpiling and replacement process. The following Supplemental Technical Information section of this document provides the requested clarification and the relevant findings of the July 2008 soil investigation.

Supplemental Technical Information

Initial *in-situ* characterization sampling identified elevated PCBs in soil at depths ranging from 4 feet below grade (fbg) to 14 feet below grade in the vicinity of former Building 21, located near the corner of North 2nd Street and Girard Avenue. Historical reporting indicated that electrical equipment had been located in a transformer room in Building 21. Excavation of this area was performed under PADEP oversight. As the excavation was underway, it became evident that PCB impacts extended beyond the originally characterized area.

The excavation was advanced based on field observations and periodic *in-situ* limit samples. Soil removed from the Building 21 area was placed on-Site into individual 20 cubic yard piles and covered with plastic sheeting. Each of the piles was sampled via grab sampling methodology. On the basis of this analysis, some of the 20 yard piles were disposed off-Site, and some of the 20 yard piles were replaced into the south side of the same Building 21 excavation. The stockpiled soils are depicted in the aerial photo provided in **Figure 1**.

Figure 1: Soil Stockpiles – Aerial Photo



The Building 21 excavation was 19' deep at the maximum depth. Eight (8) stockpiles with greater than 100 ppm total PCBs were placed at depths of 15 feet or greater in the excavation; these stockpiles are summarized in **Table 1**. These soils containing greater than 100 ppm will be remediated via excavation and off-Site disposal pursuant to the Hybrid Plan to be implemented under EPA TSCA Program oversight.

Table 1: Stockpiled Soils Use as Infill at Depths >15fbg

Stockpile ID	Sample ID	Sample Date	Total PCB Concentrations (mg/kg)
SS-030	GRAB-030	10-Aug-07	150
SS-067	GRAB-067	10-Aug-07	140
SS-112	SS-0112	9-Jul-07	850
SS-153	GRAB-153	10-Aug-07	150
SS-157	GRAB-157	10-Aug-07	390
SS-161	GRAB-161	10-Aug-07	1200
SS-203	GRAB-203	24-Aug-07	3100
SS-204	GRAB-204	24-Aug-07	1500

The other replaced soils were placed into the southern side of the excavation. A summary of the results of the samples from these 60 stockpiles, representing 1200 cubic yards of soil, is presented in **Table 2**, below.

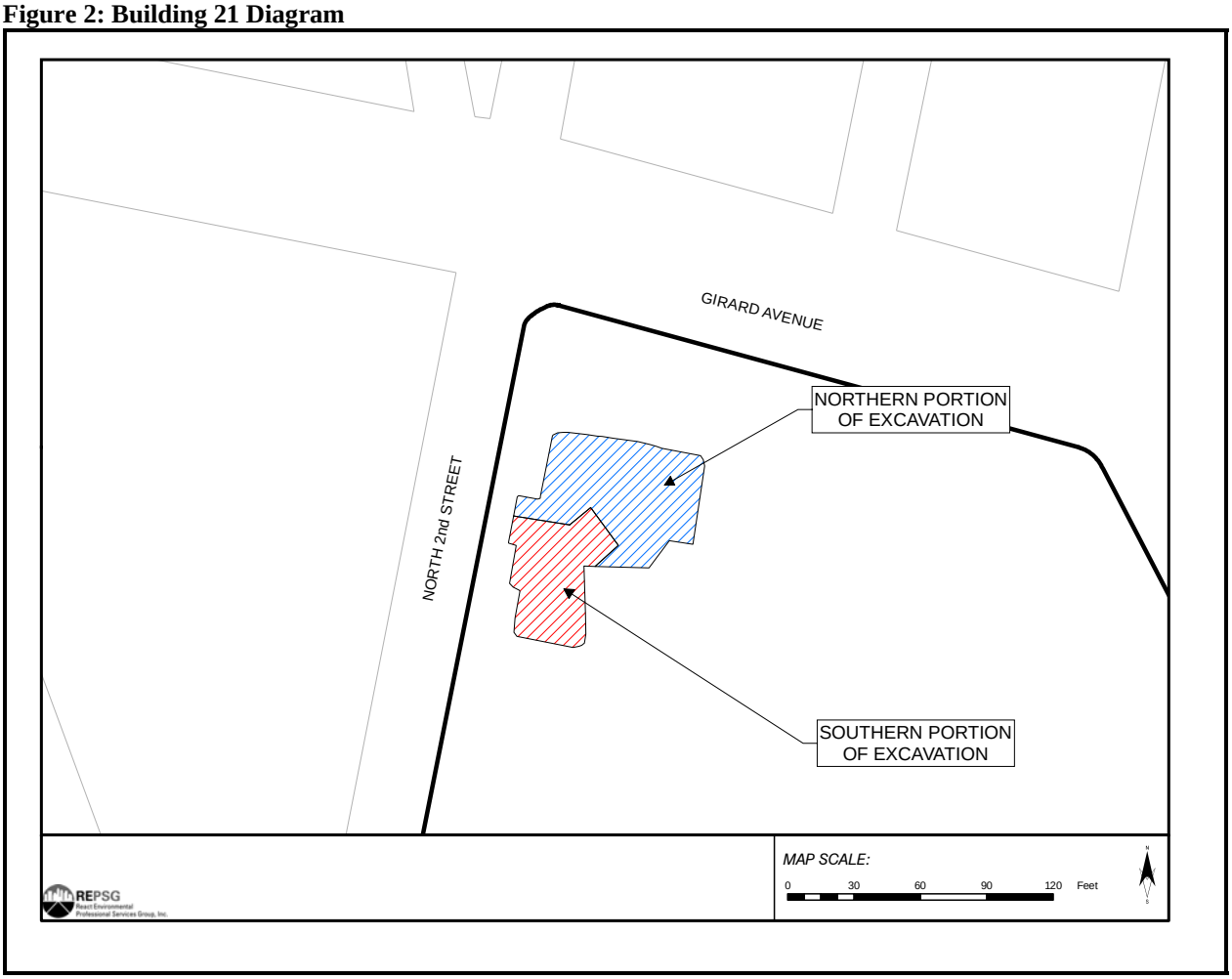
Table 2: Stockpiled Soils Re-used for Infill

Stockpile ID	Sample ID	Sample Date	Total PCB Concentrations (mg/kg)
SS-032	GRAB-032	10-Aug-07	62
SS-033	GRAB-033	10-Aug-07	10
SS-036	GRAB-036	10-Aug-07	27
SS-037	GRAB-037	10-Aug-07	35
SS-038	GRAB-038	10-Aug-07	28
SS-039	GRAB-039	10-Aug-07	35
SS-040	GRAB-040	10-Aug-07	33
SS-041	GRAB-041	10-Aug-07	23
SS-042	GRAB-042	10-Aug-07	38
SS-043	GRAB-043	10-Aug-07	18
SS-044	GRAB-044	10-Aug-07	57
SS-045	GRAB-045	10-Aug-07	39
SS-046	GRAB-046	10-Aug-07	25
SS-047	GRAB-047	10-Aug-07	64
SS-048	GRAB-048	10-Aug-07	54
SS-049	GRAB-049	10-Aug-07	76
SS-057	GRAB-057	10-Aug-07	42
SS-072	GRAB-072	10-Aug-07	60
SS-073	GRAB-073	10-Aug-07	56
SS-074	GRAB-074	10-Aug-07	5.4
SS-075	SS-0075	09-Jul-07	15
SS-083	GRAB-083	10-Aug-07	42
SS-084	SS-0084	09-Jul-07	17
SS-087	GRAB-087	10-Aug-07	36
SS-088	SS-0088	09-Jul-07	26
SS-090	GRAB-090	10-Aug-07	44
SS-092	GRAB-092	10-Aug-07	3.7
SS-094	GRAB-094	10-Aug-07	6.4
SS-095	GRAB-095	10-Aug-07	15
SS-096	GRAB-096	10-Aug-07	22
SS-097	GRAB-097	10-Aug-07	10
SS-098	GRAB-098	10-Aug-07	14
SS-099	SS-0099	09-Jul-07	8.6
SS-100	SS-0100	09-Jul-07	2.5
SS-101	SS-0101	09-Jul-07	13
SS-102	SS-0102	09-Jul-07	9.3
SS-103	SS-0103	09-Jul-07	1.2
SS-104	SS-0104	09-Jul-07	10
SS-105	SS-0105	09-Jul-07	11
SS-106	SS-0106	09-Jul-07	12

SS-107	SS-0107	09-Jul-07	8.6
SS-108	SS-0108	09-Jul-07	3.0
SS-109	SS-0109	09-Jul-07	4.4
SS-110	GRAB-110	10-Aug-07	20
SS-111	SS-0111	09-Jul-07	16
SS-117	SS-0117	09-Jul-07	34
SS-118	SS-0118	09-Jul-07	19
SS-154	SS-0154	09-Jul-07	2.4
SS-162	SS-0162	09-Jul-07	6.2
SS-164	SS-0164	09-Jul-07	6.2
SS-165	SS-0165	09-Jul-07	31
SS-169	SS-0169	09-Jul-07	37
SS-170	GRAB-170	10-Aug-07	62
SS-172	GRAB-172	10-Aug-07	58
SS-175	SS-0175	09-Jul-07	23
SS-201	GRAB-201	24-Aug-07	61
SS-202	GRAB-202	24-Aug-07	11
SS-205	GRAB-205	27-Aug-07	20
SS-206	GRAB-206	27-Aug-07	12
SS-207	GRAB-207	27-Aug-07	68

As can be seen in **Table 2** all stockpile samples indicated detectable total PCBs, but there was a high degree of variability in the analytical results for the samples, ranging from 1.2 to 76 ppm total PCBs. These soils were placed in the southern portion of the Building 21 excavation as depicted in **Figure 2**.

Figure 2: Building 21 Diagram



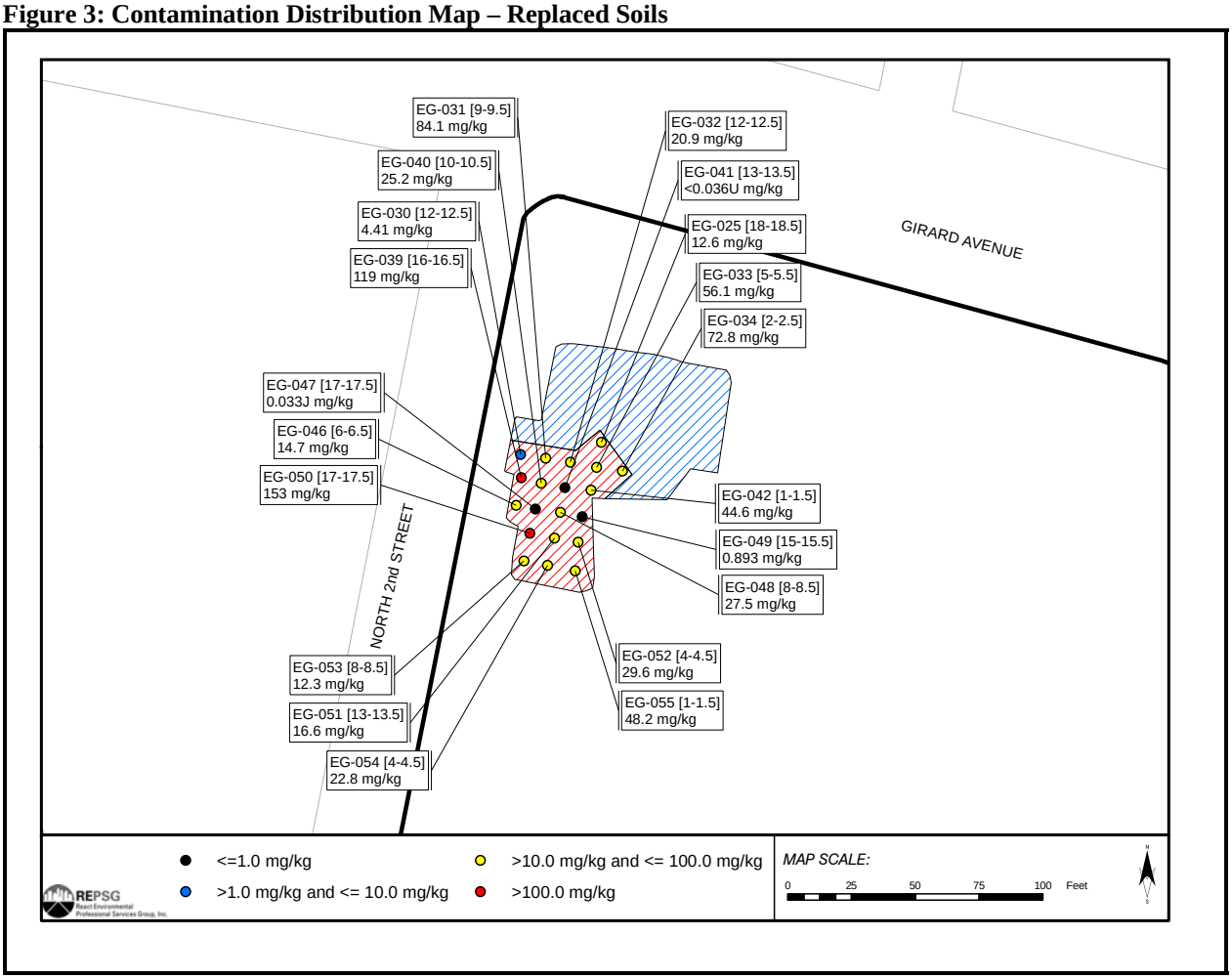
Following replacement of the stockpiled soils into the southern portion of the Building 21 excavation area, the soils were re-tested via *in-situ* Geoprobe samples collected in July 2008. These *in-situ* samples of the replaced soil were taken on a 10' grid interval. The samples were taken from random depths within these 10' grid intervals. The analytical results, provided in **Table 3**, represent the most accurate current characterization of the replaced soils located within the southern portion of the Building 21 excavation area. **Figure 3** displays the locations of the replaced soil samples.

As anticipated, two sub-15 foot locations with total PCB concentrations of greater than 100 ppm were identified within the replaced soils, at depths of 16-16.5 and 17-17.5 feet. These soils will be remediated via excavation and off-Site disposal pursuant to the Hybrid Plan.

Table 3: Analytical Results – Replaced Soil Samples

Sample ID	Sample Depth	Sample Date	Total PCB Concentrations (mg/kg)
EG-025	18-18.5	07/25/2008	12.6
EG-030	12-12.5	07/25/2008	4.41
EG-031	9-9.5	07/25/2008	84.1
EG-032	12-12.5	07/25/2008	20.9
EG-033	5-5.5	07/24/2008	56.1
EG-034	2-2.5	07/24/2008	72.8
EG-039	16-16.5	07/24/2008	119
EG-040	10-10.5	07/25/2008	25.2
EG-041	13-13.5	07/25/2008	0.036
EG-042	1-1.5	07/24/2008	44.6
EG-046	6-6.5	07/25/2008	14.7
EG-047	17-17.5	07/25/2008	0.033
EG-048	8-8.5	07/25/2008	27.5
EG-049	15-15.5	07/25/2008	0.893
EG-050	17-17.5	07/25/2008	153
EG-051	13-13.5	07/24/2008	16.6
EG-052	4-4.5	07/25/2008	29.6
EG-053	8-8.5	07/24/2008	12.3
EG-054	4-4.5	07/25/2008	22.8
EG-055	1-1.5	07/24/2008	48.2
EG-025	18-18.5	07/25/2008	12.6
EG-030	12-12.5	07/25/2008	4.41
EG-031	9-9.5	07/25/2008	84.1

Figure 3: Contamination Distribution Map – Replaced Soils



To confirm that no dilution of soil resulted from the temporary stockpiling and replacement of the Building 21 soils, REPSG compared the analytical results for the stockpiled soils to the analytical results of the recent July 2008 *in-situ* soil samples via a "t-test" statistical method. A t-test is a statistical hypothesis test that compares two datasets, and assumes as a null hypothesis that the two datasets are parts of a larger group that has the same mean value.

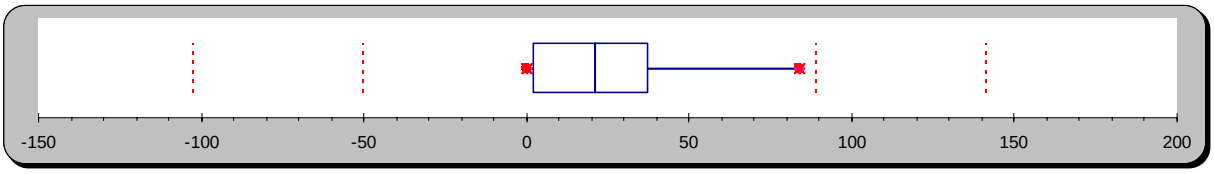
The application of the t-test in this scenario attempts to prove true that the mean concentration of total PCBs in the stockpiled soils is equal to the mean concentration of total PCBs in the replaced soils. If this statistical analysis is proven true it would validate that the stockpiled soils were indeed the source material for the replaced soils, and that there was no diluting of the material. The results of this t-test indicate that there is 78.5% likelihood that the two mean concentrations are equal, indicating that dilution of the stockpiled soils did not occur.

To further substantiate this conclusion, a box and whisker plot was created for the two datasets. This provides five characteristic values for a dataset, i.e., the lowest value, the median of the lower half of the data set (the lower hinge), the median, the median of the upper half of the data set (the upper hinge), and

the highest value. By comparing these characteristics one can draw conclusions regarding the nature of the datasets. Soils located at greater than 15', which contain over 100 ppm PCBs and will be remediated, were excluded.

Figure 4: Replaced Soils (Excluding Soils at Depths > 15fbg)

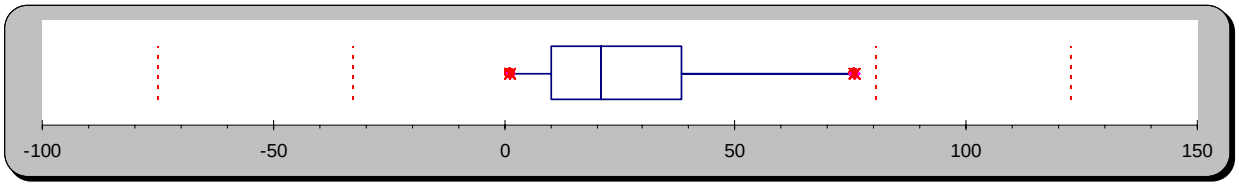
Lower Whisker	Lower Hinge	Median	Upper Hinge	Upper Whisker
0.034	2.2235	20.9	37.1	84.1



Sample ID	Sample Depth	Total PCB Concentrations (mg/kg)
EG-030	12	4.41
EG-031	9	84.1
EG-032	12	20.9
EG-033	5	56.1
EG-034	2	72.8
EG-035	10	0.037
EG-036	11	0.037
EG-040	10	25.2
EG-041	13	0.036
EG-042	1	44.6
EG-043	12	0.037
EG-044	12	0.034
EG-046	6	14.7
EG-048	8	27.5
EG-051	13	16.6
EG-052	4	29.6
EG-053	8	12.3
EG-054	4	22.8
EG-055	1	48.2

Figure 5: Stockpiled Soils (Excluding Soil Infilled at Depths > 15fbg)

Lower Whisker	Lower Hinge	Median	Upper Hinge	Upper Whisker
1.2	10	21	38.25	76



Sample ID	Total PCB Concentrations (mg/kg)	Sample ID	Total PCB Concentrations (mg/kg)	Sample ID	Total PCB Concentrations (mg/kg)
SS-032	62	SS-075	15	SS-107	9
SS-033	10	SS-083	42	SS-108	3
SS-036	27	SS-084	17	SS-109	4
SS-037	35	SS-087	36	SS-110	20
SS-038	28	SS-088	26	SS-111	16
SS-039	35	SS-090	44	SS-117	34
SS-040	33	SS-092	4	SS-118	19
SS-041	23	SS-094	6	SS-154	2
SS-042	38	SS-095	15	SS-162	6
SS-043	18	SS-096	22	SS-164	6
SS-044	57	SS-097	10	SS-165	31
SS-045	39	SS-098	14	SS-169	37
SS-046	25	SS-099	9	SS-170	62
SS-047	64	SS-100	3	SS-172	58
SS-048	54	SS-101	13	SS-175	23
SS-049	76	SS-102	9	SS-201	61
SS-057	42	SS-103	1	SS-202	11
SS-072	60	SS-104	10	SS-205	20
SS-073	56	SS-105	11	SS-206	12
SS-074	5	SS-106	12	SS-207	68

Given the variable nature of the data and the volume of soil handled, it is REPSG's opinion that the t-test and box and whisker plot statistical analyses demonstrate that the excavated Building 21 area soil was not diluted in handling during the temporary stockpiling process, and that the results of *in-situ* sampling conducted in July 2008 should be utilized for the purposes of characterizing this area and defining the appropriate remediation in the forthcoming Hybrid Plan.

Thank you very much for your consideration of this information. I look forward to speaking with you shortly.

Sincerely,

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Charlene R. Drake
Director of Operations

cc. Adam Lisausky, Esquire (Northern Liberties Development, LP)